

TRANSLATION

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P034527/WO/1	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/EP2004/009382	International filing date (<i>day/month/year</i>) 21.08.2004	Priority date (<i>day/month/year</i>) 09.06.2003
International Patent Classification (IPC) or national classification and IPC B60T7/22, G01 S13/93, B60K31/00		
Applicant DAIMLERCHRYSLER AG		

1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.	
2.	This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.	
3.	This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of <u>6</u> sheets, as follows: <div><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</div> b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).	
4.	This report contains indications relating to the following items: <div><input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application</div>	

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

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Box No. I	Basis of the report
1.	<p>With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.</p> <p><input type="checkbox"/> This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:</p> <p><input type="checkbox"/> international search (Rule 12.3 and 23.1(b))</p> <p><input type="checkbox"/> publication of the international application (Rule 12.4)</p> <p><input type="checkbox"/> international preliminary examination (Rule 55.2 and/or 55.3)</p> <p>2. With regard to the elements of the international application, this report is based on <i>(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)</i>:</p> <p><input type="checkbox"/> the international application as originally filed/furnished</p> <p><input checked="" type="checkbox"/> the description:</p> <p>pages <u>4-11</u> as originally filed/furnished</p> <p>pages* <u>1-3</u> received by this Authority on <u>14.06.2005 with letter of 20.01.2005</u></p> <p>pages* _____ received by this Authority on _____</p> <p><input checked="" type="checkbox"/> the claims:</p> <p>nos. _____ as originally filed/furnished</p> <p>nos.* _____ as amended (together with any statement) under Article 19</p> <p>nos.* <u>1-13</u> received by this Authority on <u>14.06.2005 with letter of 20.01.2005</u></p> <p>nos.* _____ received by this Authority on _____</p> <p><input checked="" type="checkbox"/> the drawings:</p> <p>sheets <u>1/1</u> as originally filed/furnished</p> <p>sheets* _____ received by this Authority on _____</p> <p>sheets* _____ received by this Authority on _____</p> <p><input type="checkbox"/> a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.</p>
3.	<p><input type="checkbox"/> The amendments have resulted in the cancellation of:</p> <p><input type="checkbox"/> the description, pages _____</p> <p><input type="checkbox"/> the claims, nos. _____</p> <p><input type="checkbox"/> the drawings, sheets/figs _____</p> <p><input type="checkbox"/> the sequence listing (<i>specify</i>): _____</p> <p><input type="checkbox"/> any table(s) related to sequence listing (<i>specify</i>): _____</p>
4.	<p><input type="checkbox"/> This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).</p> <p><input type="checkbox"/> the description, pages _____</p> <p><input type="checkbox"/> the claims, nos. _____</p> <p><input type="checkbox"/> the drawings, sheets/figs _____</p> <p><input type="checkbox"/> the sequence listing (<i>specify</i>): _____</p> <p><input type="checkbox"/> any table(s) related to sequence listing (<i>specify</i>): _____</p>

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																					
1. Statement	<table><tbody><tr><td rowspan="2">Novelty (N)</td><td>Claims</td><td><u>1-13</u></td><td>YES</td></tr><tr><td>Claims</td><td></td><td>NO</td></tr><tr><td rowspan="2">Inventive step (IS)</td><td>Claims</td><td><u>1-13</u></td><td>YES</td></tr><tr><td>Claims</td><td></td><td>NO</td></tr><tr><td rowspan="2">Industrial applicability (IA)</td><td>Claims</td><td><u>1-13</u></td><td>YES</td></tr><tr><td>Claims</td><td></td><td>NO</td></tr></tbody></table>	Novelty (N)	Claims	<u>1-13</u>	YES	Claims		NO	Inventive step (IS)	Claims	<u>1-13</u>	YES	Claims		NO	Industrial applicability (IA)	Claims	<u>1-13</u>	YES	Claims		NO
Novelty (N)	Claims		<u>1-13</u>	YES																		
	Claims		NO																			
Inventive step (IS)	Claims	<u>1-13</u>	YES																			
	Claims		NO																			
Industrial applicability (IA)	Claims	<u>1-13</u>	YES																			
	Claims		NO																			
2. Citations and explanations (Rule 70.7)	<p>Reference is made to the following documents:</p> <p>D1: DE 101 49 146 A (BOSCH GMBH ROBERT), 17 April 2003 (2003-04-17)</p> <p>D2: EP-A-1 318 491 (BAYERISCHE MOTOREN WERKE AG), 11 June 2003 (2003-06-11)</p> <p>D3: DE 199 34 670 A (BOSCH GMBH ROBERT), 21 December 2000 (2000-12-21)</p> <p>D4: WO 03/064215 A (MATSUSHITA ELECTRIC WORKS LTD), 7 August 2003 (2003-08-07)</p> <p>D5: DE 43 33 357 A (BOSCH GMBH ROBERT), 6 April 1995 (1995-04-06)</p> <p>Document D1, which is considered to be the prior art closest to the subject matter of claim 1, discloses (the references in parentheses are to D1) a device for detecting an instantaneous distance between a motor vehicle (32) and an obstacle (34), comprising distance sensors (16) and a control unit (10), the control unit (10) being designed to calculate a path that will be followed by the motor vehicle (32) using static and dynamic vehicle data, and also being designed to distinguish between relevant obstacles lying within the path and non-relevant obstacles lying outside the path.</p>																					

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The subject matter of claim 1 differs from what is known from D1 in that each distance sensor (16) has a variable detection area, in that the control unit (10) is designed to adjust the range of the detection areas of the distance sensors (16) to fit lateral boundaries of the path, and in that the distance sensors (16) which have detection areas lying wholly within the path are controlled by the control unit (10) so that they operate with the maximum range.

The subject matter of claim 1 is therefore novel (PCT Article 33(2)).

The problem addressed by the present invention can thus be seen as that of improving the level of obstacle recognition accuracy and thus increasing driving safety.

The solution proposed in claim 1 of the application involves an inventive step (PCT Article 33(3)) because the idea of adjusting the ranges of individual sensors so as to restrict the detection area essentially to the path of the vehicle is not known from D1 or any of the other known prior art documents. Therefore, even applying his own specialist knowledge, a person skilled in the art would not have been able to find anything in D1 that might have led him in an obvious way to what is claimed in claim 1.

Claims 2 to 7 are dependent on claim 1 and therefore also meet the PCT requirements in respect of novelty and inventive step.

The corresponding method claim 8 and its dependent claims

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	<p>(claims 9 to 13) also meet the requirements of PCT Article 33(2) and (3) .</p> <p>The subject matter of claims 1 to 13 is industrially applicable (PCT Article 33(4)) .</p>